

FABRICATION METHOD AND STRUCTURE FOR FERROELECTRIC NONVOLATILE MEMORY FIELD EFFECT TRANSISTOR

ABSTRACT OF THE DISCLOSURE

A method for fabricating a non-volatile memory device. The method includes

5 providing a substrate, e.g., silicon. The method also includes forming an oxide layer
overlying the substrate; and forming a buffer layer overlying the oxide layer. A ferroelectric
material is formed overlying the substrate and is formed preferably overlying the buffer layer.
The method also includes forming a gate layer overlying the ferroelectric material, where the
gate layer is overlying a channel region. The method further includes forming first
10 source/drain region adjacent to a first side of the channel region and a second source/drain
region adjacent to a second side of the channel region. In other embodiments, the method can
also include other steps.

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